

May 28, 2008



MINDEN-TAHOE AIRPORT

Airport Master Plan
**Working Paper Four &
Draft Final Report**



Agenda

- **Review of the Planning Process**
- **Working Paper Four**
 - Airport Plans
 - Environmental Review
 - Implementation Plan
- **Draft Final Report**
- **Next Steps**
- **Questions and Answers**
- **Adjournment**



Airport Master Plan Presentation Team

- **Barnard Dunkelberg & Company/TULSA, OK & DENVER, CO**

- ✈ **Peter Van Pelt**/Project Manager

- ✈ **Ryan Hayes**/Lead Technical Planner



Planning Process

- **Inventories**
- **Forecasts of Aviation Activity**
- **Demand/Capacity Analysis & Facility Requirements Determination**
- **Concepts, Alternatives & Development Plan**
- **Environmental Review**
- **Airport Plans**
- **Implementation Program**
- **Draft Report**
- **Final Report** (Prepared After Approval of Planset & Draft Report)





MINDEN-TAHOE AIRPORT

Working Paper Four *Airport Plans*



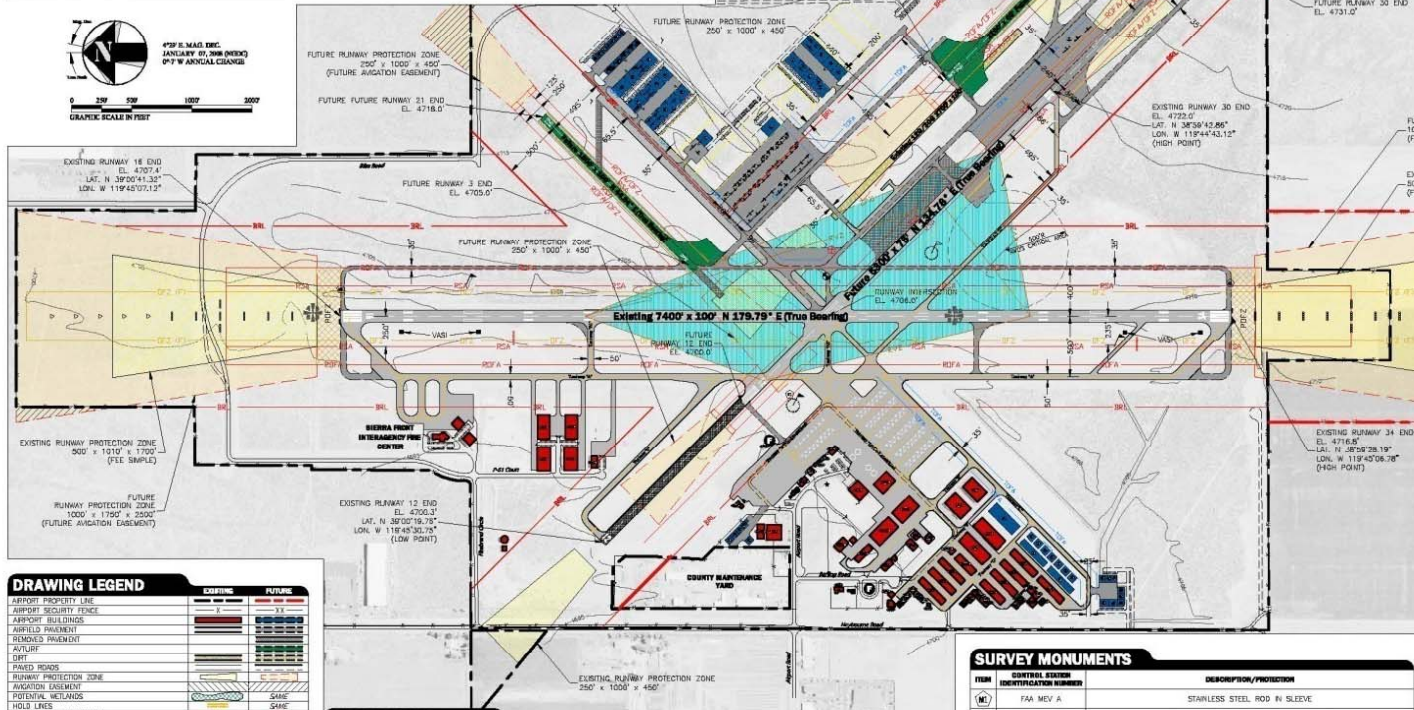
RUNWAY DATA	RUNWAY 16/34		RUNWAY 12/30		RUNWAY 15/30/36		RUNWAY 1/21	
	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE
APPROACH VISIBILITY MINIMUM	> 1-MILE	< 3/4-MILE	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
TAR PART 77 APPROACH SLOPE	3:1	3:1	3:1	3:1	3:1	3:1	3:1	3:1
TAR PART 77 APPROACH CATEGORY	VISUAL	PRECISION	VISUAL	NON-PRECISION	VISUAL	PRECISION	VISUAL	PRECISION
RUNWAY LENGTH x WIDTH	7400' x 100'	SAME	5300' x 75'	SAME	2500' x 80'	2500' x 100'	1800' x 100'	SAME
RUNWAY PAVEMENT TYPE	ASPHALT	ASPHALT	ASPHALT	ASPHALT	ASPHALT	ASPHALT	ASPHALT	ASPHALT
PAVEMENT STRENGTH (IN 1000 LBS.)	30s, 30s	SAME	30s, 30s	SAME	30s, 30s	30s, 30s	30s, 30s	30s, 30s
RUNWAY LIGHTING	NON-PRECISION	PRECISION	NON-PRECISION	PRECISION	NON-PRECISION	PRECISION	NON-PRECISION	PRECISION
RUNWAY MARKING	NON-PRECISION	PRECISION	NON-PRECISION	PRECISION	NON-PRECISION	PRECISION	NON-PRECISION	PRECISION
EFFECTIVE RUNWAY GRADIENT %	0.1%	SAME	0.1%	SAME	0.1%	SAME	0.1%	SAME
MAXIMUM RUNWAY GRADIENT %	0.1%	SAME	0.1%	SAME	0.1%	SAME	0.1%	SAME
RUNWAY LINE-OF-SIGHT	CRITERIA MET	SAME	CRITERIA MET	SAME	CRITERIA MET	SAME	CRITERIA MET	SAME
VISUAL APPROACH AIDS	VASI-4	NOT	VASI-4	NOT	VASI-4	NOT	VASI-4	NOT
NAVIGATIONAL AIDS	GPS, BEACON	MULTI-REASON/OPS	GPS	SAME	NOT	SAME	NOT	SAME
APPROACH REFERENCE ZONE	C-III	SAME	C-III	SAME	C-III	SAME	C-III	SAME
RUNWAY SAFETY AREA (RSA) WIDTH	500'	SAME	150'	SAME	150'	SAME	150'	SAME
RSA LENGTH BEYOND STOP END	1000'	SAME	240'	SAME	240'	SAME	240'	SAME
RUNWAY OBJECT FREE AREA (OFA) WIDTH	800'	SAME	250'	SAME	250'	SAME	250'	SAME
OFA LENGTH BEYOND STOP END	850'/750'	1000'/1000'	240'	SAME	240'	SAME	240'	SAME
OBSTACLE FREE ZONE (OFZ) WIDTH *	400'	SAME	250'	SAME	250'	SAME	250'	SAME
OFZ LENGTH BEYOND STOP END *	200'	SAME	250'	SAME	250'	SAME	250'	SAME
RUNWAY CENTERLINE TO HOLD LINE	250'	SAME	125'	SAME	125'	SAME	125'	SAME
TAXIWAY OBJECT FREE AREA	180'	SAME	131'	SAME	131'	SAME	131'	SAME
TAXIWAY SAFETY AREA	118'	SAME	78'	SAME	78'	SAME	78'	SAME
TAXIWAY WINGTIP CLEARANCE	34'	SAME	28'	SAME	28'	SAME	28'	SAME
TAXIWAY SURFACE TYPE	ASPHALT	ASPHALT	ASPHALT	ASPHALT	ASPHALT	ASPHALT	ASPHALT	ASPHALT

* No OFZ object penetrations

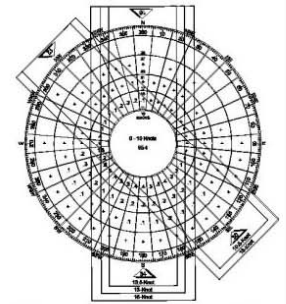
NON-STANDARD CONDITIONS	A/C DESIGN GROUP		STANDARD		NON-STANDARD		REMARKS
	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	
RW 16 ROFA BEYOND RW END	C-III	SAME	1000'	SAME	950'	1000'	TO BE SUBMITTED BY BARNARD DUNKELBERG & COMPANY FOR REVIEW BY THE FAA
RW 34 ROFA BEYOND RW END	C-III	SAME	1000'	SAME	250'	1000'	TO BE SUBMITTED BY BARNARD DUNKELBERG & COMPANY FOR REVIEW BY THE FAA

SPONSOR APPROVAL		DATE
DARRIN, DOUGLAS COUNTY BOARD OF COMMISSIONERS		

FAA APPROVAL		DATE
The contents of this plan do not necessarily reflect the official views or policy of the FAA. Acceptance of this document by the FAA does not in any way constitute a commitment on the part of the United States to participate in any development depicted herein, nor does it indicate that the proposed development is environmentally acceptable in accordance with appropriate public laws.		



ALL WEATHER WINDROSE



RUNWAY	10.5-KNOT	13-KNOT	16-KNOT
RUNWAY 16/34	93.8%	98.0%	98.0%
RUNWAY 12/30	92.5%	95.0%	95.0%
COMBINED	93.8%	97.8%	99.0%

SOURCE: WIND ROSE AND ANALYSIS TABULATION PROVIDED BY BARNARD DUNKELBERG AND CO., DATA PROVIDED BY ALL-WEATHER INC. MINDEN-TAHOE AIRPORT, AUTOMATED WEATHER OBSERVATION SYSTEM (AWOS) PERIOD OF RECORD - JANUARY 2004-JANUARY 2007, ONE MINUTE OBSERVATIONS, TOTAL OBSERVATIONS 499,414.

REVISIONS & NOTES		DATE
NO.	DESCRIPTION	
1	REVISED AND SHUT (1993 MASTER PLAN)	MAY 4, 1993
2	MEAD AND HUNT (AS BUILT ALP)	DEC. 2000

- NOTES:
- This drawing reflects planning standards specific to this airport and is not a product of detailed engineering design analysis. It is not intended to be used for construction documentation or navigation.
 - Aerial Photo by Aerial Data Service, INC. October 2007.
 - Horizontal coordinate data is NAD83, vertical data is NAVD83.
 - No breakable edge surface penetrations.
 - No existing OFZ object penetrations.
 - All BR's shown for 30' structure heights.

DRAWING LEGEND	EXISTING		FUTURE	
	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
AIRPORT SECURITY FENCE	[Symbol]	SECURITY FENCE	[Symbol]	SECURITY FENCE
AIRPORT BUILDINGS	[Symbol]	AIRPORT BUILDINGS	[Symbol]	AIRPORT BUILDINGS
PAVED ROAD	[Symbol]	PAVED ROAD	[Symbol]	PAVED ROAD
RUNWAY PROTECTION ZONE	[Symbol]	RUNWAY PROTECTION ZONE	[Symbol]	RUNWAY PROTECTION ZONE
AVIATION EASEMENT	[Symbol]	AVIATION EASEMENT	[Symbol]	AVIATION EASEMENT
POTENTIAL WILDLAND	[Symbol]	POTENTIAL WILDLAND	[Symbol]	POTENTIAL WILDLAND
HOLD LINES	[Symbol]	HOLD LINES	[Symbol]	HOLD LINES
BUILDING RESTRICTION LINE	[Symbol]	BUILDING RESTRICTION LINE	[Symbol]	BUILDING RESTRICTION LINE
RUNWAY SAFETY AREA	[Symbol]	RUNWAY SAFETY AREA	[Symbol]	RUNWAY SAFETY AREA
RUNWAY OBJECT FREE AREA	[Symbol]	RUNWAY OBJECT FREE AREA	[Symbol]	RUNWAY OBJECT FREE AREA
TAXIWAY OBJECT FREE AREA	[Symbol]	TAXIWAY OBJECT FREE AREA	[Symbol]	TAXIWAY OBJECT FREE AREA
OBSTACLE FREE ZONE	[Symbol]	OBSTACLE FREE ZONE	[Symbol]	OBSTACLE FREE ZONE
FUEL STORAGE AREA	[Symbol]	FUEL STORAGE AREA	[Symbol]	FUEL STORAGE AREA
AIRPORT BEACON	[Symbol]	AIRPORT BEACON	[Symbol]	AIRPORT BEACON
LIGHTED AND DOME & SEGMENTED CIRCLE	[Symbol]	LIGHTED AND DOME & SEGMENTED CIRCLE	[Symbol]	LIGHTED AND DOME & SEGMENTED CIRCLE
WIND CONE	[Symbol]	WIND CONE	[Symbol]	WIND CONE
PRECISION APPROACH PATH INDICATOR (PAPI)	[Symbol]	PRECISION APPROACH PATH INDICATOR (PAPI)	[Symbol]	PRECISION APPROACH PATH INDICATOR (PAPI)
SECTION CORNER	[Symbol]	SECTION CORNER	[Symbol]	SECTION CORNER
RUNWAY END CENTER LIGHTS (REL)	[Symbol]	RUNWAY END CENTER LIGHTS (REL)	[Symbol]	RUNWAY END CENTER LIGHTS (REL)
AIRPORT REFERENCE POINT (ARP)	[Symbol]	AIRPORT REFERENCE POINT (ARP)	[Symbol]	AIRPORT REFERENCE POINT (ARP)
NON-DIRECTIONAL BEACON (NDB)	[Symbol]	NON-DIRECTIONAL BEACON (NDB)	[Symbol]	NON-DIRECTIONAL BEACON (NDB)
DATE	[Symbol]	DATE	[Symbol]	DATE

AIRPORT DATA		EXISTING	FUTURE
AIRPORT ELEVATION (AMSL) JAWO 88		7728.0'	7727.0'
AIRPORT REFERENCE POINT (ARP) MAG 83		LAT. N 39°00'00" E LONG. W 119°45'04.30"	LAT. N 39°00'00" E LONG. W 119°45'04.30"
MEAN MAX. TEMPERATURE (HIGHEST MONTH)		80° F	SAME
AIRPORT REFERENCE CODE		C-III	SAME
RUNWAY LIGHTING		RW 16/34 RW 12/30 RW 15/36/30	B-1 (EMALL) B-1 (EMALL) B-1 (EMALL)

RUNWAY END DATA		EXISTING	FUTURE
RUNWAY END COORDINATES (NAD83)		EXISTING LON. W 119°45'04.30" LAT. N 39°00'00.00"	FUTURE LON. W 119°45'04.30" LAT. N 39°00'00.00"
RUNWAY ELEVATIONS (NAVD83)		EXISTING 4707.8' / 4716.8' 4716.8'	FUTURE 4707.8' / 4716.8' 4716.8'
TOUCHDOWN ZONE ELEVATION		4716.8'	4716.8'

SURVEY MONUMENTS		DESCRIPTION/PRODUCTION
FROM	CONTROL POINT IDENTIFICATION NUMBER	
TO	FAA MEV A	SHIRLESS STEEL ROD IN SLEEVE
TO	MEV AP STA A	DES TOPOGRAPHIC DISK SET IN CONCRETE
TO	MEV AP STA B	DES TOPOGRAPHIC DISK SET IN CONCRETE

MINDEN-TAHOE AIRPORT

Douglas County, Nevada

AIRPORT LAYOUT DRAWING

Barnard Dunkelberg & Company

TBA
1616 East 12th Street
Tahoe, California 96149
916.385.8844

MEV
2400 Nevada Street, Suite 400
Carson, California 94404
925.822.8844

DATE
MAY 2006

SCALE
1" = 500'

SHEET NO
2 OF 20

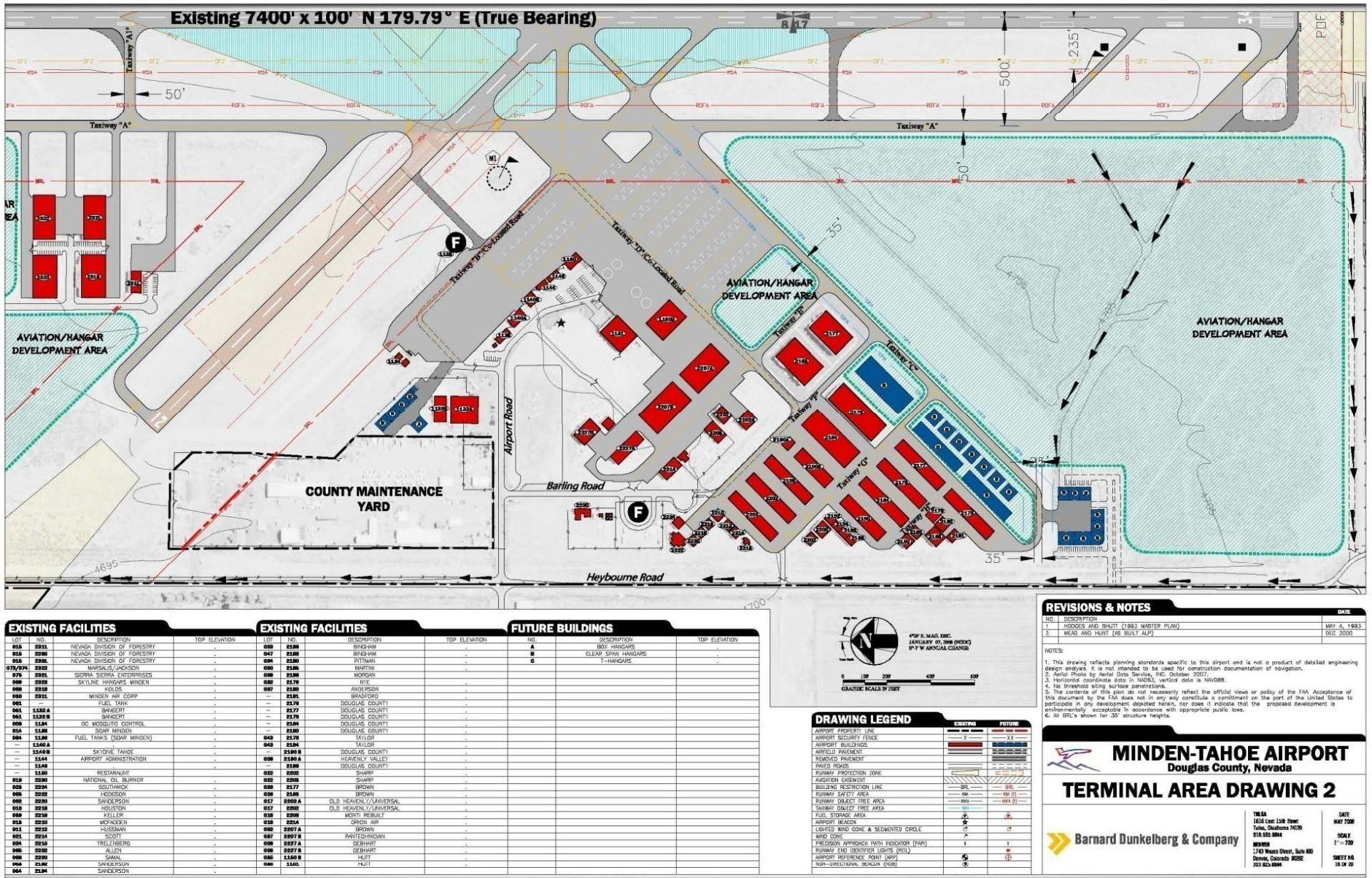


Figure E15 Terminal Area Drawing 2

E.25

LAND USE COMPATIBILITY GUIDELINES

LAND USE CATEGORY	AIRPORT INFLUENCE ZONE (AIZ)	TRAFFIC PATTERN ZONE (TPZ)	APPROACH ZONE (AZ)	RUNWAY PROTECTION ZONE (RPZ)
RESIDENTIAL				
Single-Family, Nursing Homes, Mobile Homes, Multi-Family, Apartments, condominiums	+	0/1	0/3	---
PUBLIC				
Schools, Libraries, Hospitals	+	0/1	0/3	---
Churches, Auditoriums, Concert Halls	+	0/1	0/3	---
Transportation, Parking, Cemeteries	++	++	++	0/3
COMMERCIAL & INDUSTRIAL				
Offices, Retail Trade	++	+	0/1	---
Service Commercial, Wholesale Trade, Warehousing, Light Industrial	++	+	0/1	---
Heavy Manufacturing, Utilities, Extractive industry	++	++	0/3	0/3
AGRICULTURAL & RECREATIONAL				
Cropland	++	++	++	++
Livestock Raising	++	++	++	0/3
Parks, Playgrounds, Golf, Golf Courses, Riding	++	++	++	0/3
Baldies, Water Recreation	++	+	0/3	---
Outdoor Spectator Sports	++	+	0/3	---
Amphitheaters	++	++	++	++
Campgrounds	++	++	++	++
++ Clearly Acceptable + Marginally Acceptable 0/1 Marginally Unacceptable 0/3 Marginally Unacceptable -- Clearly Unacceptable				

Notes: Development projects which are within airport, including average ponds and landfills, within 1000 feet of the airport are unacceptable. (Ref: FAA AC 150/5000.3)

Conditions:

- If allowed, mitigation measures and disclosure must be required as a condition of development.
- Any structures associated with use allowed in the RPZ must be located outside the RPZ.
- If no reasonable alternative exists, use should be located as far from extended runway centerline as possible.
- If no reasonable alternative exists, use should be located as far from extended runway centerline and traffic pattern as possible.
- Transportation facilities in the RPZ (i.e. roads, railroads, waterways) must be configured to comply with Part 77 requirements.

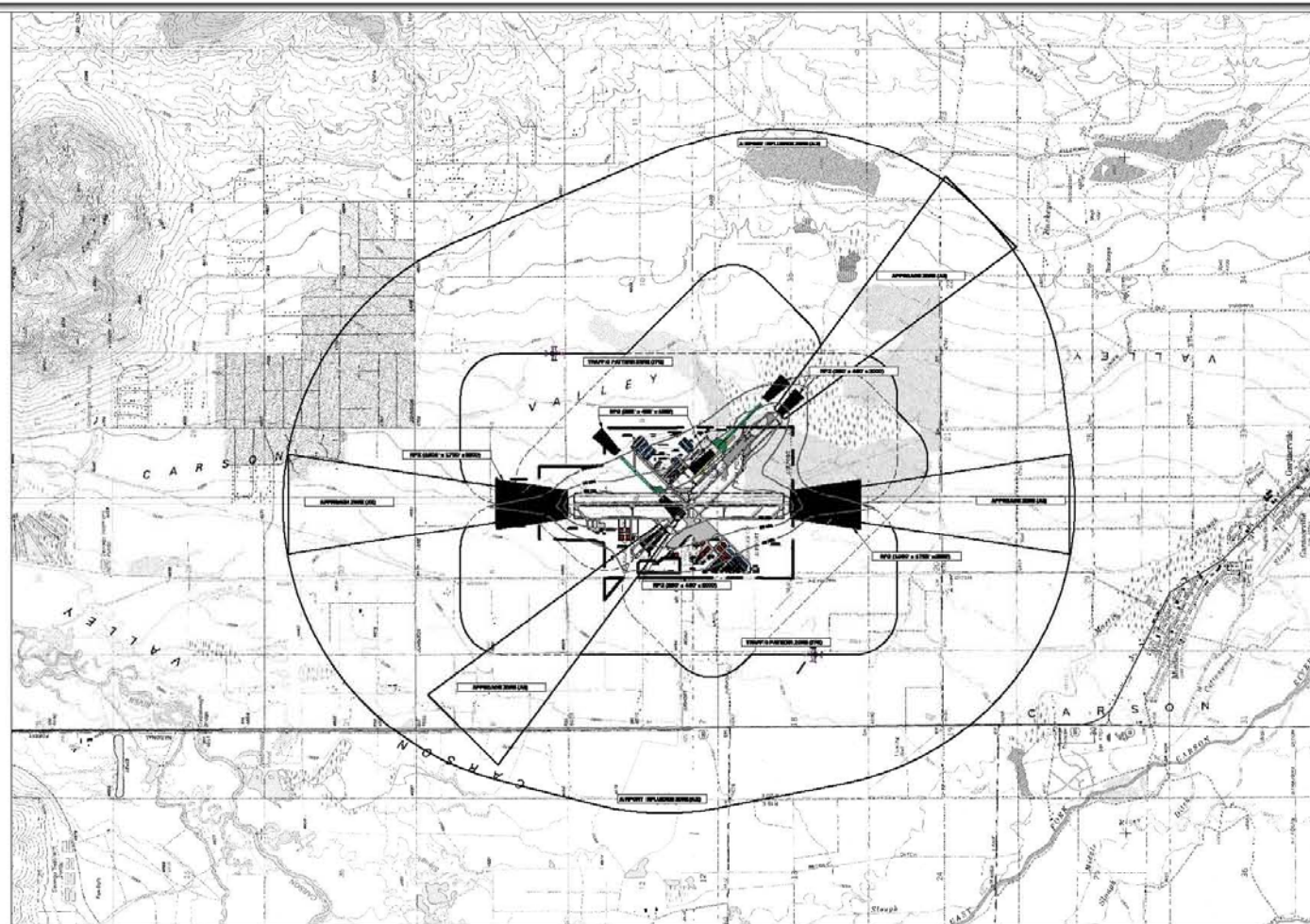
LAND USE COMPATIBILITY CRITERIA

Land Use Availability	Interpretation/Comments
++ Clearly Acceptable	The activities associated with the specified land use will experience little or no impact due to airport operations. Disclosure of airport proximity should be required as a condition of development.
+ Marginally Acceptable	The specified land use is acceptable in this zone or area. Impact may be perceived by some residents. Disclosure of airport proximity should be required as a condition of development. Disclosure of airport proximity should be required as a condition of development.
0 Marginally Unacceptable	An impact will be perceived as a result of allowing the specified use in this zone or area. Disclosure of airport proximity should be required as a condition of development.
- Clearly Unacceptable	Specified use should be allowed only if no reasonable alternative exists. Disclosure of airport proximity should be required as a condition of development.
- Clearly Unacceptable	Specified use must not be allowed. Potential safety or over flight nuisance impacts are likely in this area.

EXISTING ZONING ORDINANCES

The noise compatibility guidelines included in the Douglas County Master Plan establish the 55 DNL noise contour as the threshold of significance for residential development.

Minden-Tahoe Airport compatible land use and height restriction overlay zoning is in the process of being adopted.



REVISIONS & NOTES

NO.	DESCRIPTION	DATE
1	1. This drawing reflects planning standards specific to this airport and is not a product of detailed engineering design analysis. It is not intended to be used for construction documentation or navigation.	
2	2. Aerial Photo by Aerial Data Services, Inc. October 2007.	
3	3. Horizontal coordinate data in NAD83, vertical data is NGVD83.	

MINDEN-TAHOE AIRPORT
Douglas County, Nevada

OFF-AIRPORT LAND USE DRAWING

Barnard Dunkelberg & Company

PROJECT: 2008 Land Use Study
Tahoe, Nevada 96095
11.0.000.0000

DATE: MAY 2008
SCALE: 1" = 2000'
SHEET NO.: 18 OF 20

Figure E18 Off-Airport Land Use Drawing



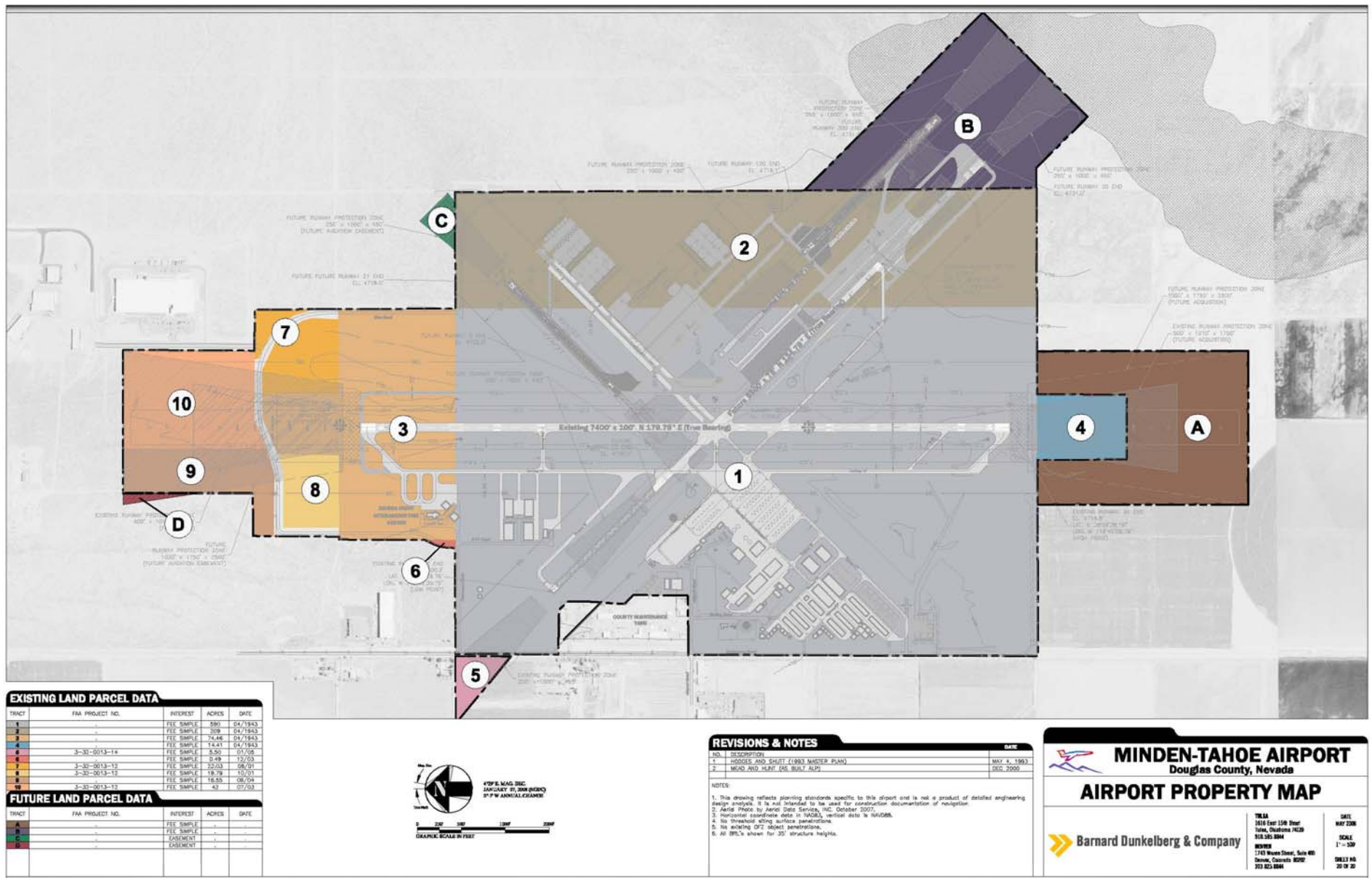


Figure E19 Airport Property Map

E.29





MINDEN-TAHOE AIRPORT

Working Paper Four *Environmental Review*



Environmental Review

- **National Environmental Policy Act (NEPA)**
- **Database Searches and Reviews**
- **Environmental Impact Categories as included in:**
 - ✈ **FAA Order 1050.1E, Environmental Policies and Procedures**
 - ✈ **FAA Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instruction for Airport Actions**



Environmental Review Requirements

- **Master Plan only presents an overview of environmental regulations required prior to implementation of each specific project.**
- **Master Plan DOES NOT analyze or quantify environmental impacts of each proposed project.**
- **FAA Order 1050-1E, Environmental Impacts: Policies and Procedures**
 - **Identifies projects normally categorically excluded. If a project is not on the list, an EA is likely required.**
 - **Paragraph 14.6 Projects Not Requiring a Noise Analysis**



Environmental Review Requirements *Continued*

✈ Paragraph 14.6 Projects Not Requiring a Noise Analysis

- ▶ *14.6a No noise analysis is needed for proposals involving Design Group I and II airplanes in Approach Categories A through D operating at airports whose forecast operations in the period covered by the EA do not exceed 90,000 annual propeller operations OR 700 jet operations.*

- **Any proposed project (e.g. Runway 12/30 shift) requiring an EA will have to include a noise analysis as the current level of jet operations EXCEEDS 700 per year.**



2006 Douglas County Master Plan

■ Chapter 5: Conservation Element: NOISE

➤ Page 5-74 states the following standards should be utilized by the County.

- “These standards can be achieved through application of regulations relating to land use management and isolation of noise-producing equipment, insulation, and equipment modification.”

Noise Compatibility Guidelines		
Zoning District	Level	Measure
Industrial	70 dBA	$L_{eq}(24)^2$
Commercial	64 dBA	L_{DN}^*
Residential	55 dBA	L_{DN}^*
* L_{DN} and DNL both represent the day night average noise level		



2006 DNL Noise Contour

» The Barnard Dunkelberg & Company Team

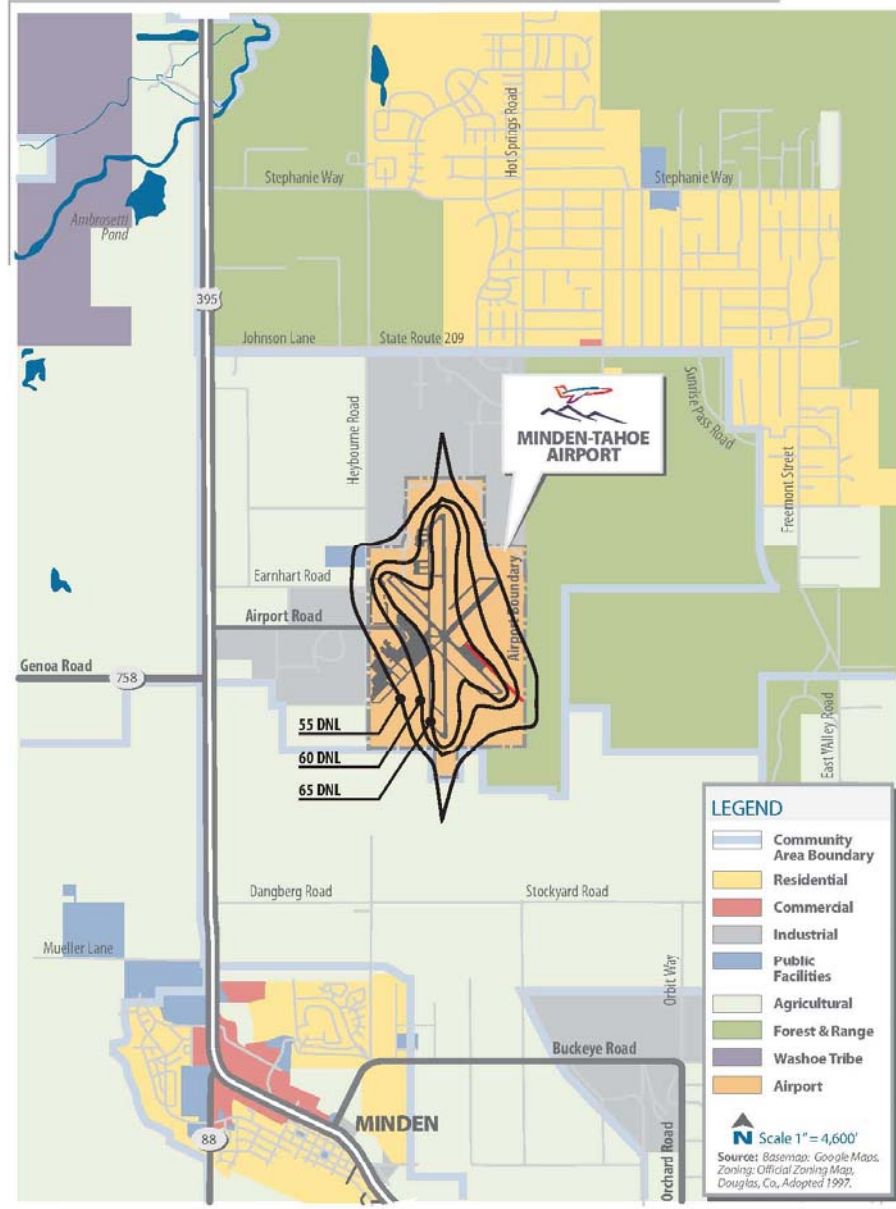


Figure F2 2006 DNL Noise Contours with Generalized Existing Zoning

» The Barnard Dunkelberg & Company Team



MINDEN-TAHOE AIRPORT MASTER PLAN

2026 DNL Noise Contour

» The Barnard Dunkelberg & Company Team

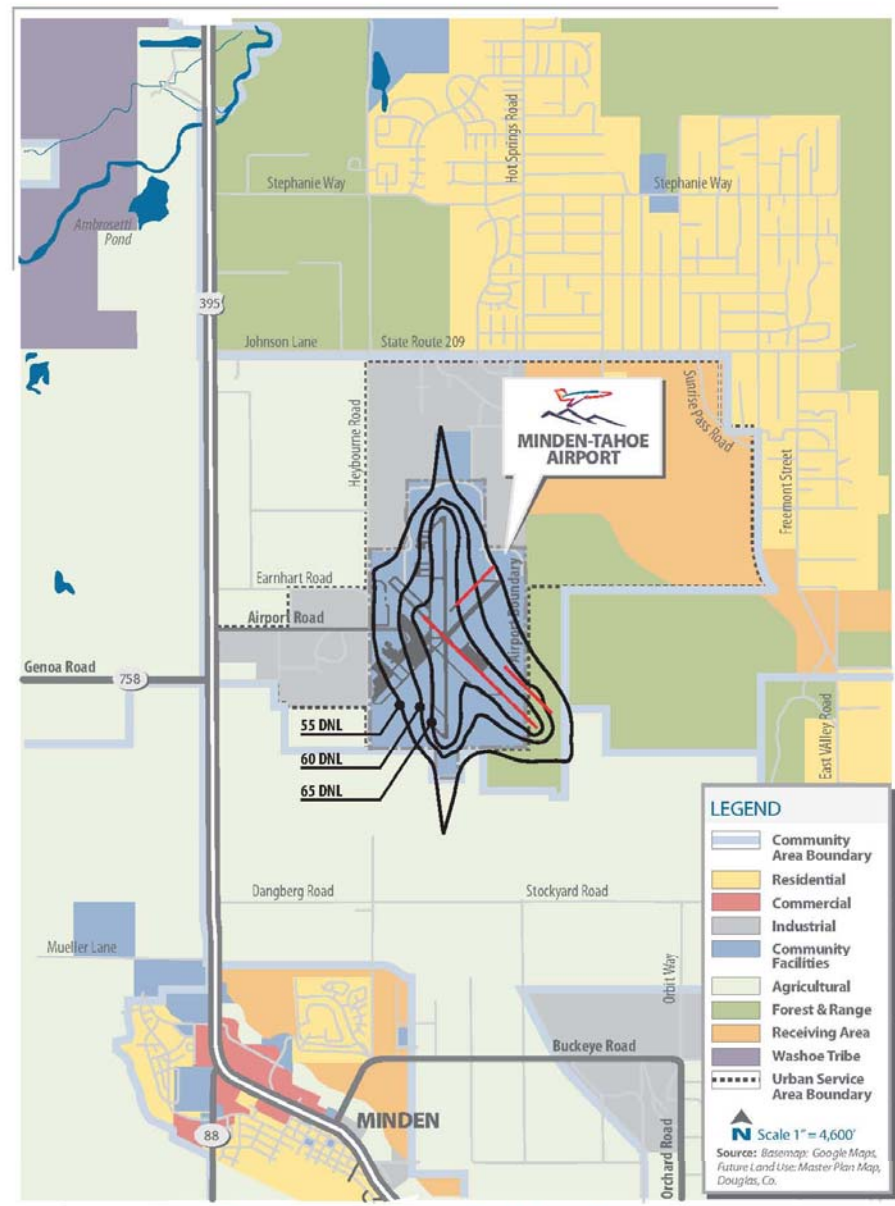


Figure F3 2026 DNL Noise Contours with Generalized Existing Zoning

» The Barnard Dunkelberg & Company Team



MINDEN-TAHOE AIRPORT MASTER PLAN

F.12

Summary of Potential Impacts

Category	Impact	Notes
Noise and Compatible Land Use	⊙	Increased aircraft operations. Potential positive impact from Runway 12/30 shift.
Air Quality	⊙	Short-term during construction.
Water Quality	⊙	Storm water permit and Storm water Pollution Prevention Plan (SWPPP) required for projects that disturb one or more acres.
Historical, Architectural, Archaeological, and Cultural Resources	○	
Fish, Wildlife, and Plants	○	
Wetlands	⊙	Potential wetland impacts near planned runway shifts. Wetland boundaries should be professionally delineated.
Wild and Scenic Rivers	○	
Section 4(F) Property	○	
Environmental Justice	○	
Hazardous Materials, Pollution Prevention, and Solid Waste	○	
Floodplains	⊙	Potential floodplain impacts near planned runway shifts.
Construction Impacts	⊙	Temporary during construction.
Farmland	○	Gardnerville clay loam in the vicinity of the Airport is not irrigated and likely has not been reclaimed of excess salts and sodium.
○ No Impact ⊙ Potential Moderate Impact ● Significant Impact		





MINDEN-TAHOE AIRPORT

Working Paper Four *Implementation Plan*



Implementation Plan

- **Capital Improvement Plan Project List**
- **Project Cost Estimates**
- **Phasing Recommendations**



PHASE I (0-5 Years) Development Plan Highlights

■ Project Highlights (2008 – 2013):

- Pavement Maintenance
- Eastside Utilities (Phased)
- Eastside Tiedown Apron (Phased)
- Environmental for Runway 3/21
- Convert Old Runway 21 into Taxiway C Extension
- Construct Runway 3/21 and Glider Turnout
- Environmental for Runways 12G/30G and 12/30 Shifts
- Private and County Hangar Construction



PHASE II (6-10 Years) Development Plan Highlights

■ Project Highlights:

- Land Acquisition for Runway Shifts
- Relocate Portion of Bliss Road
- Shift Runways 12/30 and 12G/30G
- Pavement Removal of Northwest end of Runway 12
- Construct Glider Turn-Outs and Taxilanes on Eastside
- Acquire RPZ Easements



PHASE III (11-20 Years) Development Plan Highlights

■ Project Highlights:

- Pavement Maintenance
- Construct Connector Taxiway between Runway 34 End and Intersection
- Construct 90 degree Bypass Connector Taxiways at each end of Runway 16/34
- Construct Glider/Small Aircraft Taxilanes on Eastside
- Additional Hangar Construction as required



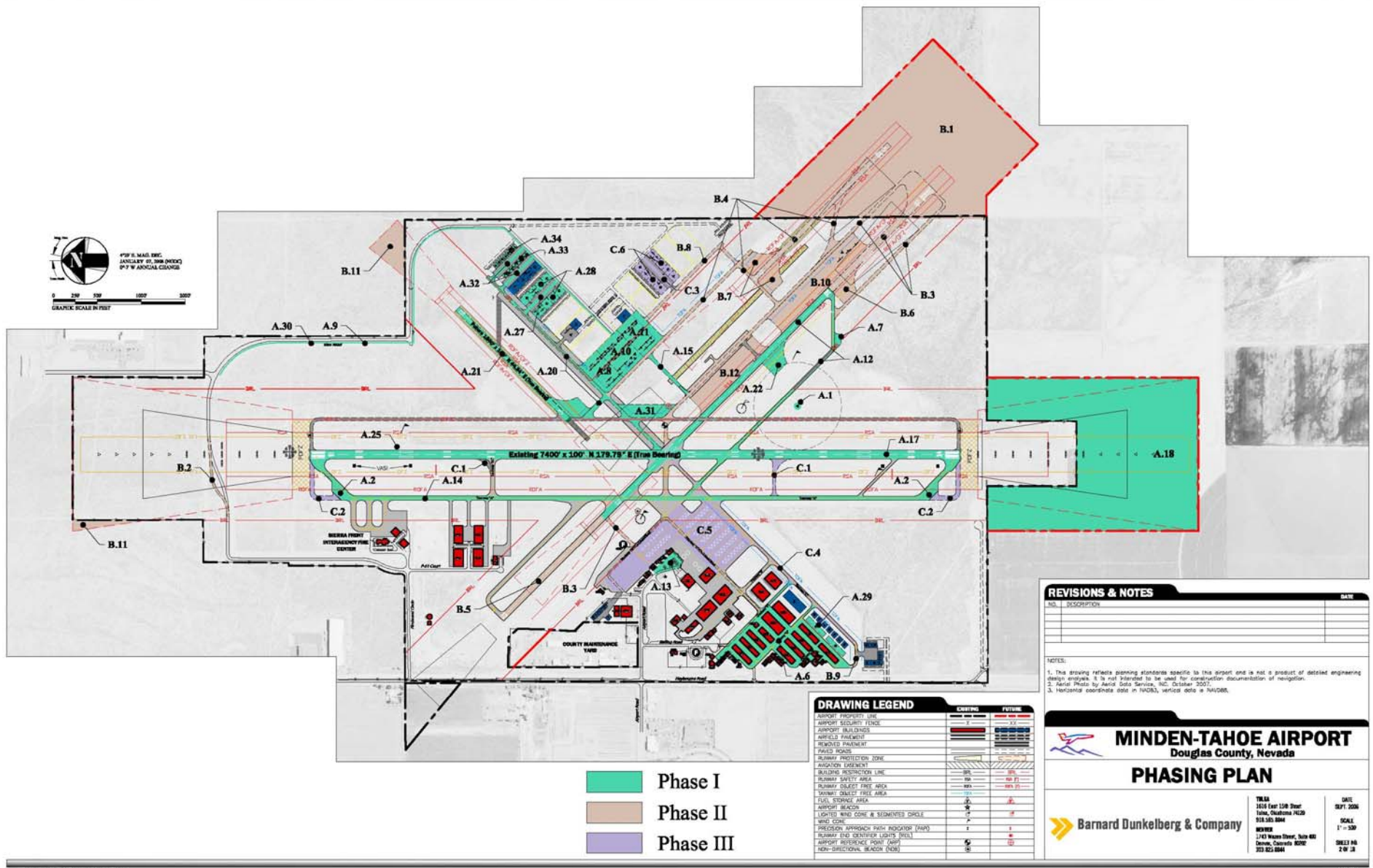


Figure G1 Phasing Plan

G.7



Implementation Plan Summary

Phase	CIP Total Costs	Federal AIP Funding	Local Funding	Private Funding
Phase I (0-5 Years)	\$18,259,290	\$11,489,965	\$2,426,305	\$4,343,020
Phase II (6-10 Years)	\$13,634,342	\$12,952,625	\$681,717	\$0
Phase III (11-20 Years)	\$3,637,510	\$2,702,712	\$142,248	\$792,550
Grand-Totals:	\$35,531,142	\$27,145,302	\$3,250,270	\$5,135,570





MINDEN-TAHOE AIRPORT

Draft Report

***Review of Initial
Concepts & Alternatives***



Planning Considerations *(from Inventory)*

■ Airside Issues

- ✈ Safe/Efficient Utilization
- ✈ Verify Design Standards
- ✈ Runway Configuration
- ✈ Evaluate Future Instrument Approach Procedure
- ✈ Soaring Operations, Interim & Long-Term Solutions
- ✈ GA & Corporate Aircraft Operations

■ Landside Issues

- ✈ East Side Infrastructure
- ✈ Maintain Self Sufficiency
- ✈ Improve Glider Staging Areas
- ✈ Verify Design Standards
- ✈ Enhance GA Security



Planning Considerations *Continued*

■ **Airport Operations Issues**

- ✈ Reduce Incursion Potential
- ✈ East Side Infrastructure
- ✈ Airport Weight Ordinance & PPR Test?
- ✈ Stakeholder/Management Communication
- ✈ Enhance GA Security
- ✈ Improve Glider Staging Areas
- ✈ Maintain Self Sufficiency
- ✈ Economic Development & Growth Management
- ✈ Enhance Airport Compatibility with Surrounding Community



Planning Assumptions

- **Airport Role will Not Change**
- **Existing Airport Reference Codes (ARCs) will be Maintained for each Runway**
- **Forecasted Aviation Demand will be Accommodated**
- **Glider/Tow Plane Facilities will be Enhanced to Facilitate Soaring while Maintaining and Enhancing the Safety of the Airport**
- **Continued Compatibility of Surrounding Land Uses to Airport Operations**



Goals for Development

- **Accommodate Forecast Operations in a Safe And Efficient Manor.**
- **Ensure that Future Development will Continue to Accommodate a Variety of GA Activities.**
- **Enhance and Facilitate Soaring While Maintaining and Improving Safety.**
- **Identify the Best Land Use Types for the Landside Development Areas.**
- **Foster Complementary Development of Airport's Environs.**
- **Enhance the Self-sustaining Capability of the Airport and Ensure the Financial Feasibility of Airport Development.**
- **Encourage the Protection of Existing Public and Private Investment in Land And Facilities.**

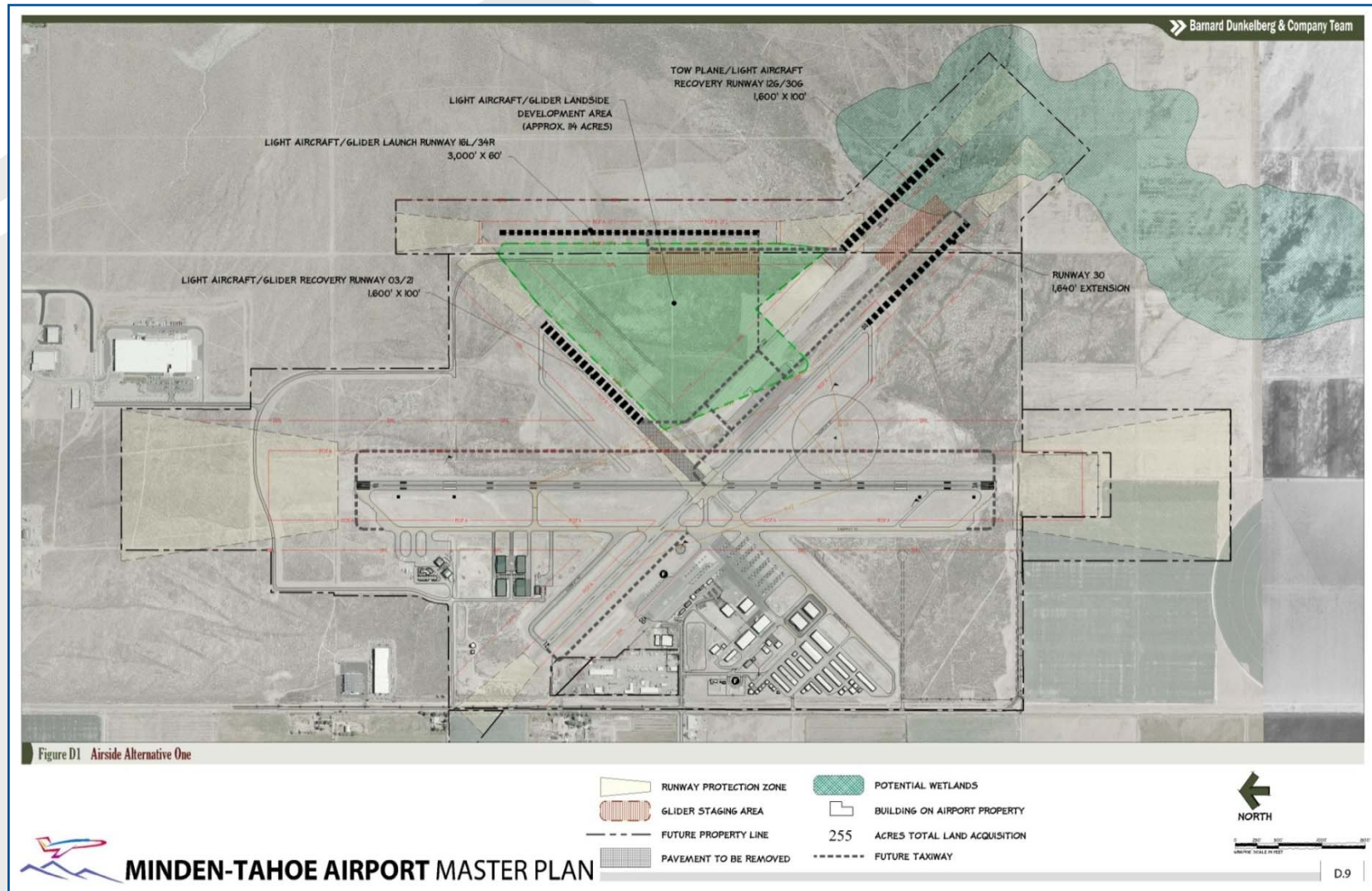


Airside Alternatives Screening Factors

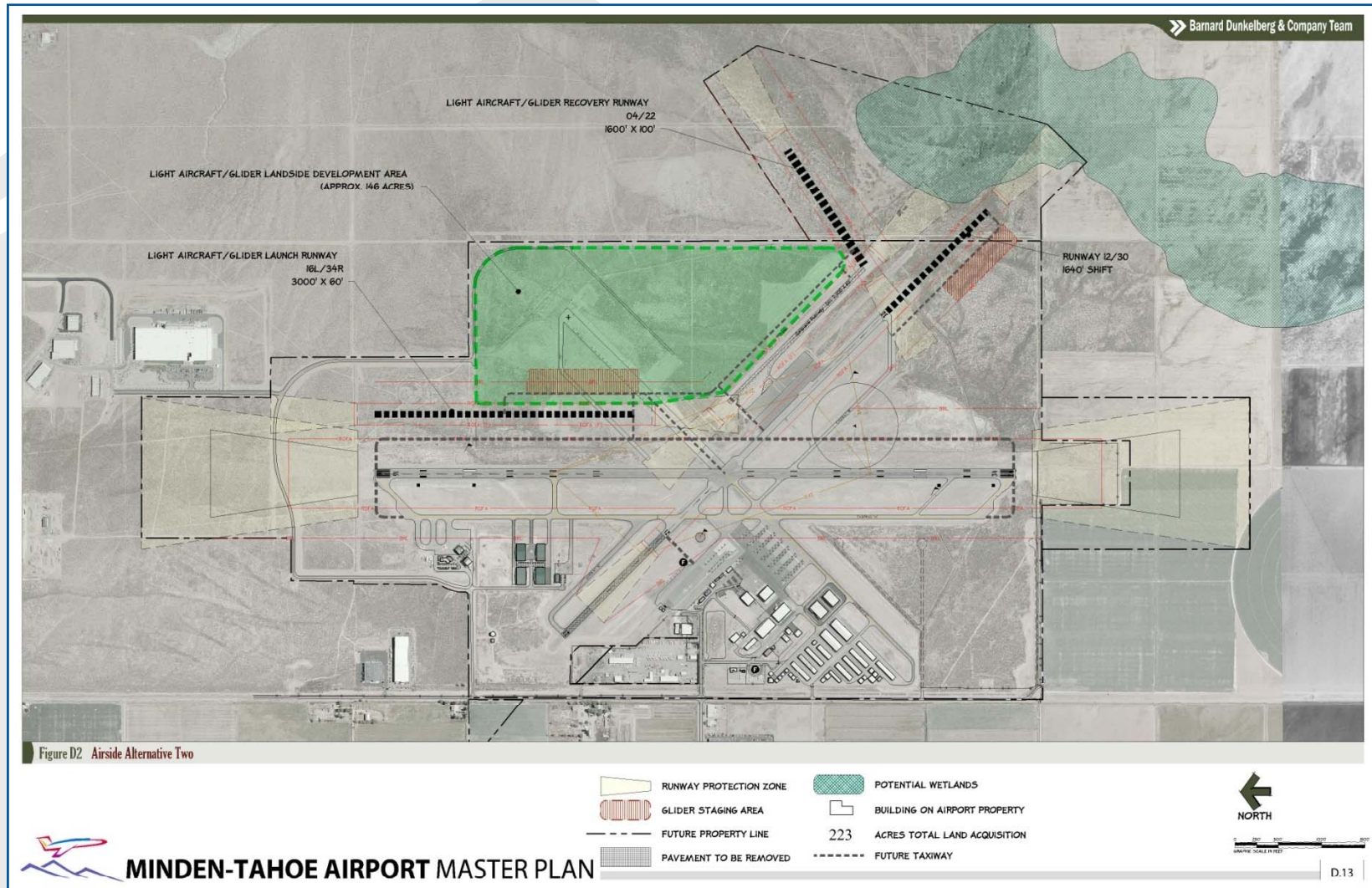
- **Maintains and Enhances Glider Operational Efficiency**
- **Best Segregation of Air Traffic Options**
- **Best Segregation of Landside and Taxiing Operations**
- **Provides for “World Class” Sport Aviation Facilities**
- **Maximizes RPZ Separation**
- **Maintains/Preserves IAP and Large Aircraft Use of RW 16/34**
- **Additional X-Wind Runway without Sacrifice to Landside Development Area**
- **Maximizes Landside Development Area**
- **Requires Land Acquisition**
- **Enhances Revenue Generating Potential**
- **Minimizes Capital Expenditure**



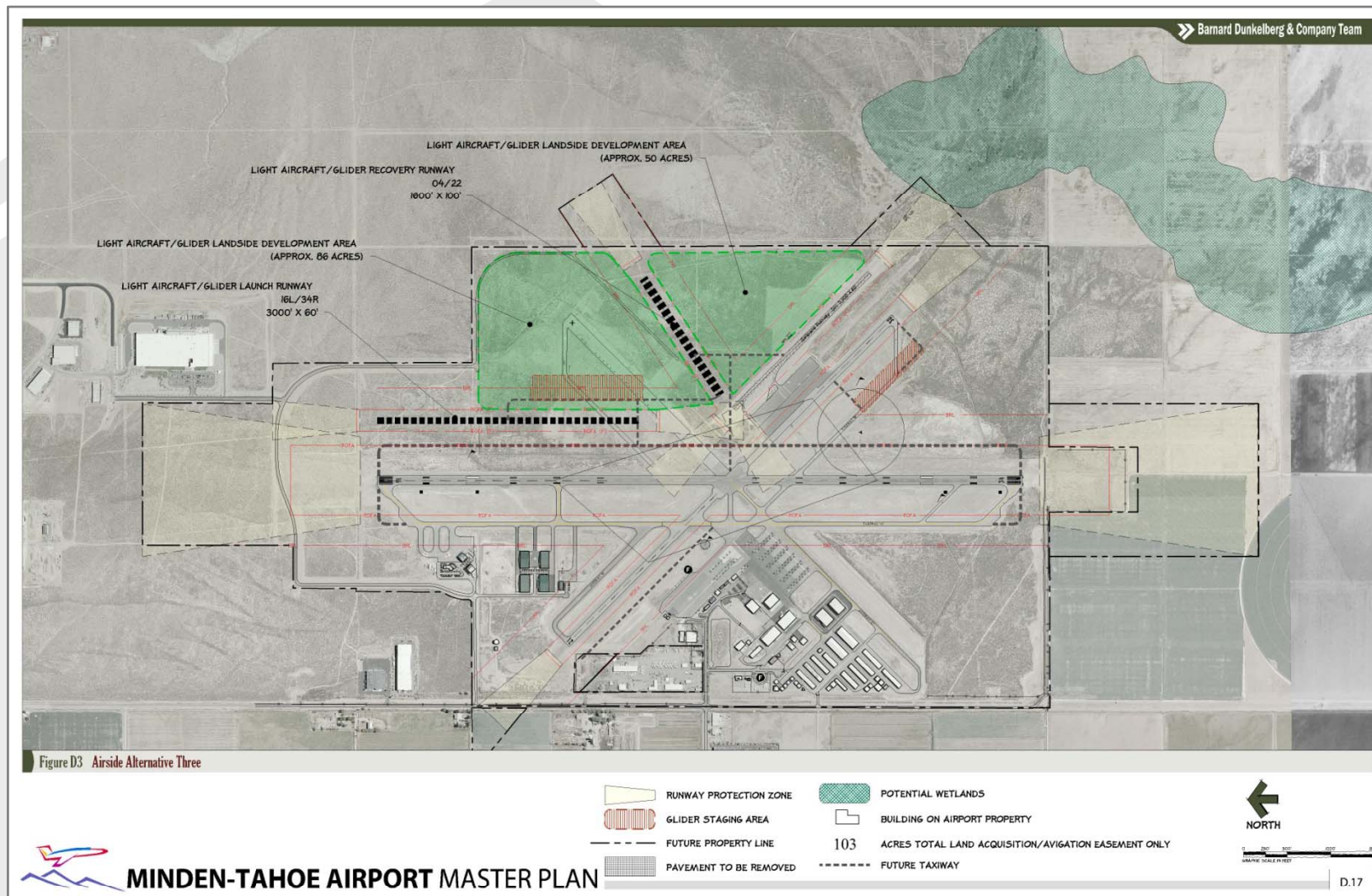
Airside Alternative One



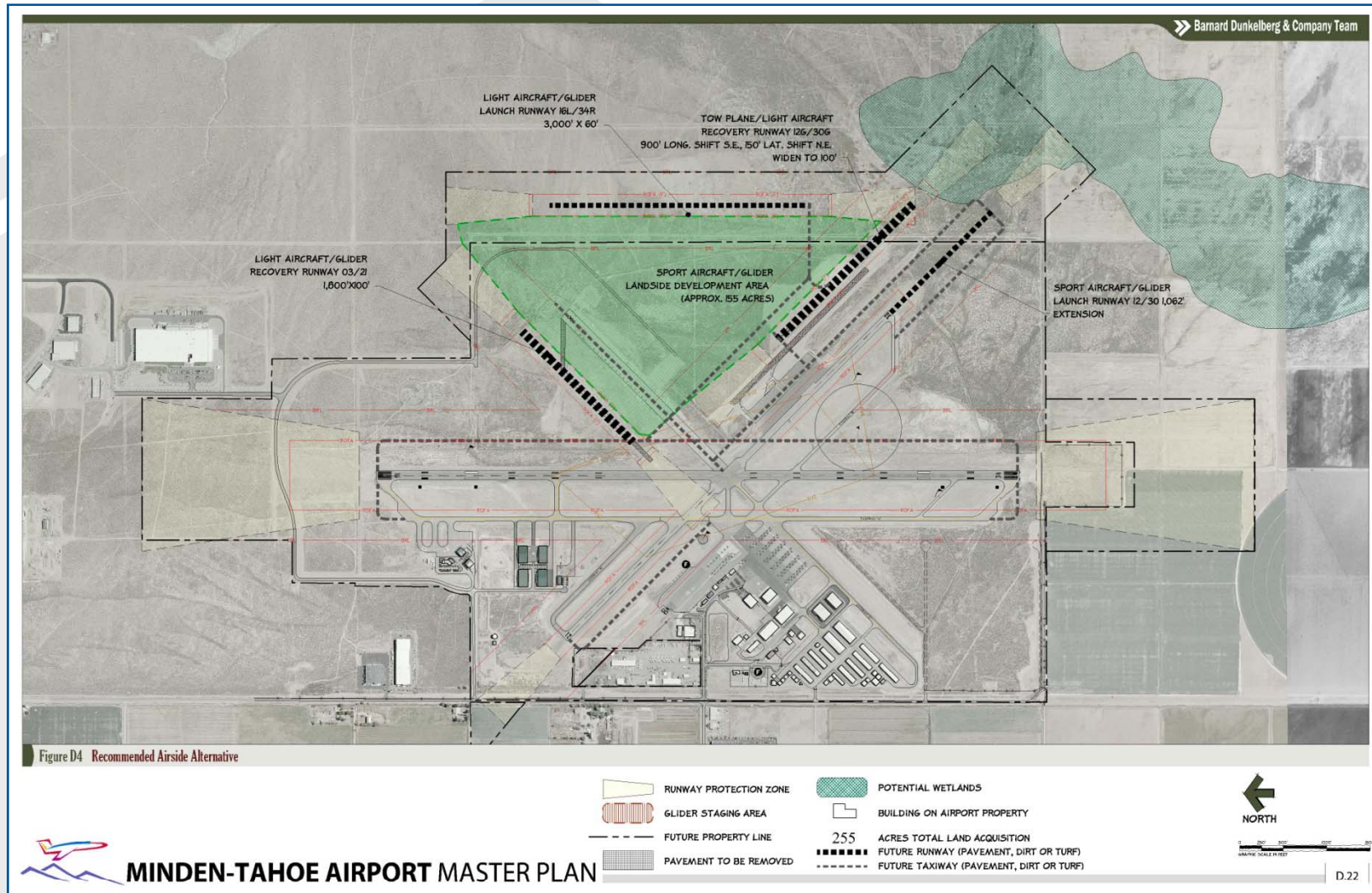
Airside Alternative Two



Airside Alternative Three



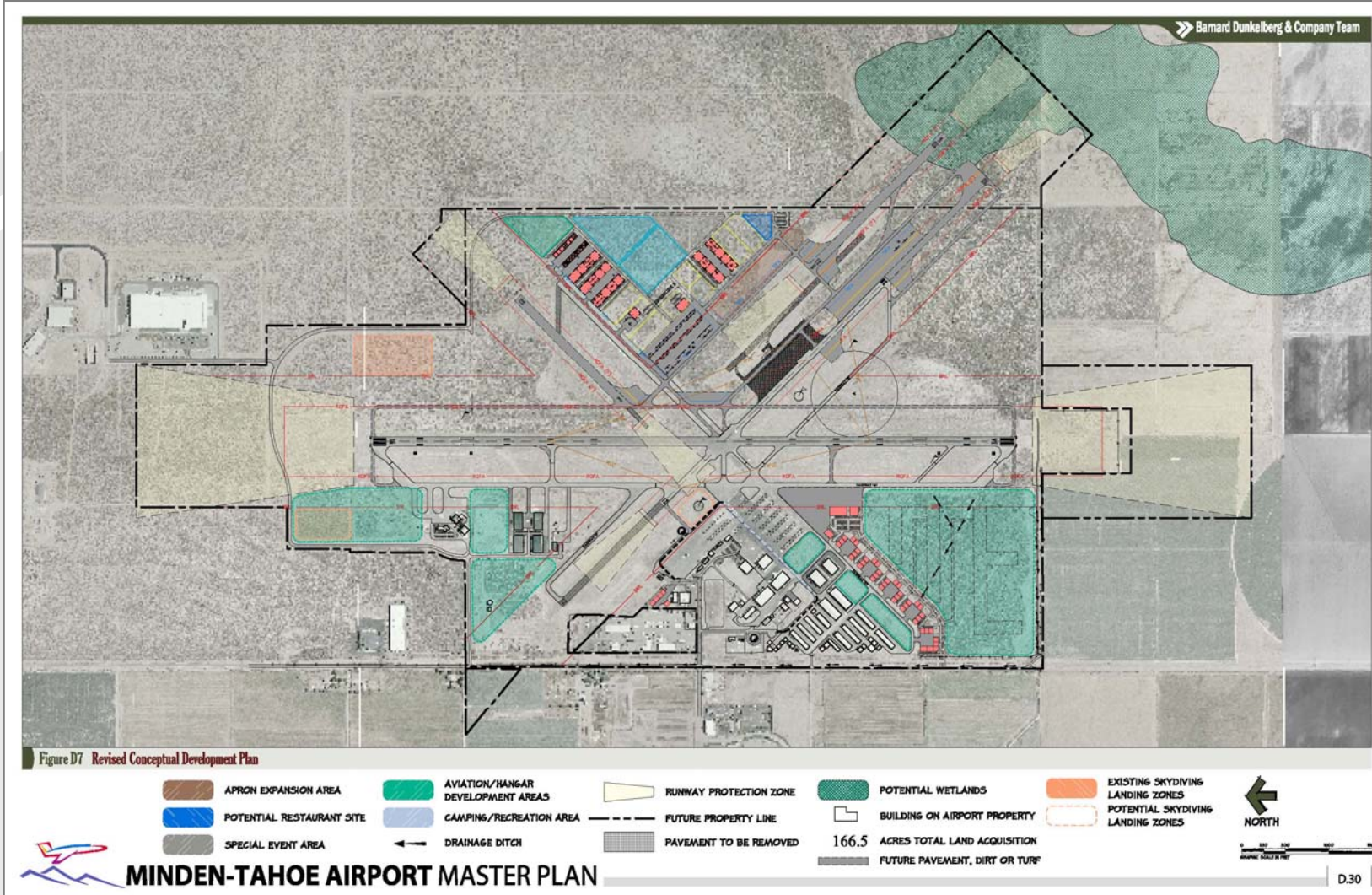
Recommended Airside Alternative



Public-Driven Revisions to Conceptual Development Plan (CDP)

- **Removal of Parallel Runway 16L/34R from CDP**
- **Revision of Eastside Landside Layout**
- **Added Pinon Aero Phase One, Two and Footprint for Remaining Phases**
- **Created an Alternative CDP with Development Staying on Existing Airport Property**



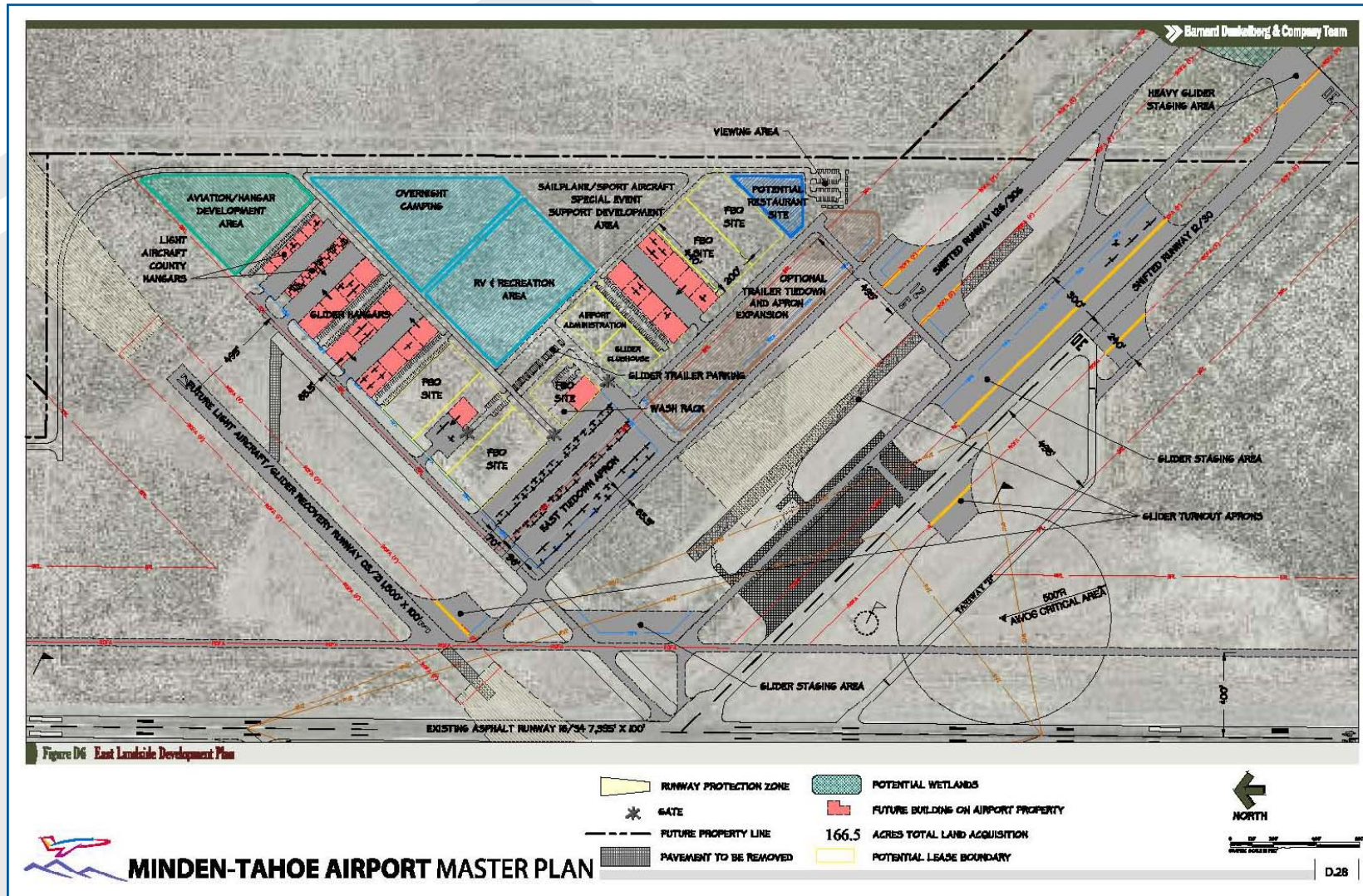


Summary of CDP Revisions

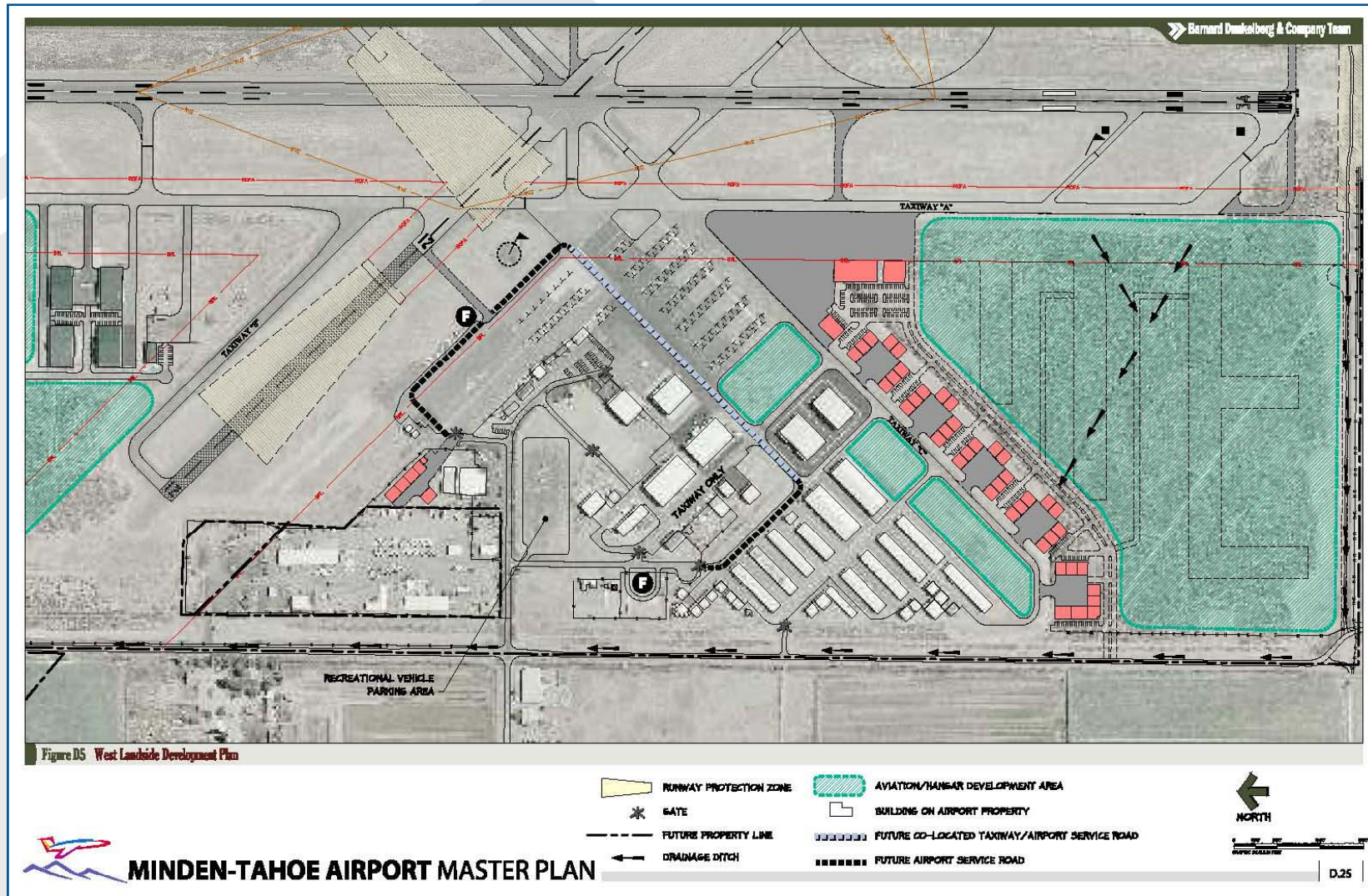
- Westside leaseholder plans added
- Eastside glider/small aircraft hangar layout modified
- Potential Eastside Restaurant location moved
- Parallel Runway 16L/34R removed
- Glider turnout areas added for landing on Runways 21, 30 and 30G
- Glider staging apron layouts modified
- Runway 12G/30G shifted further to the southwest and a high speed connector taxiway added between the runway and the staging apron



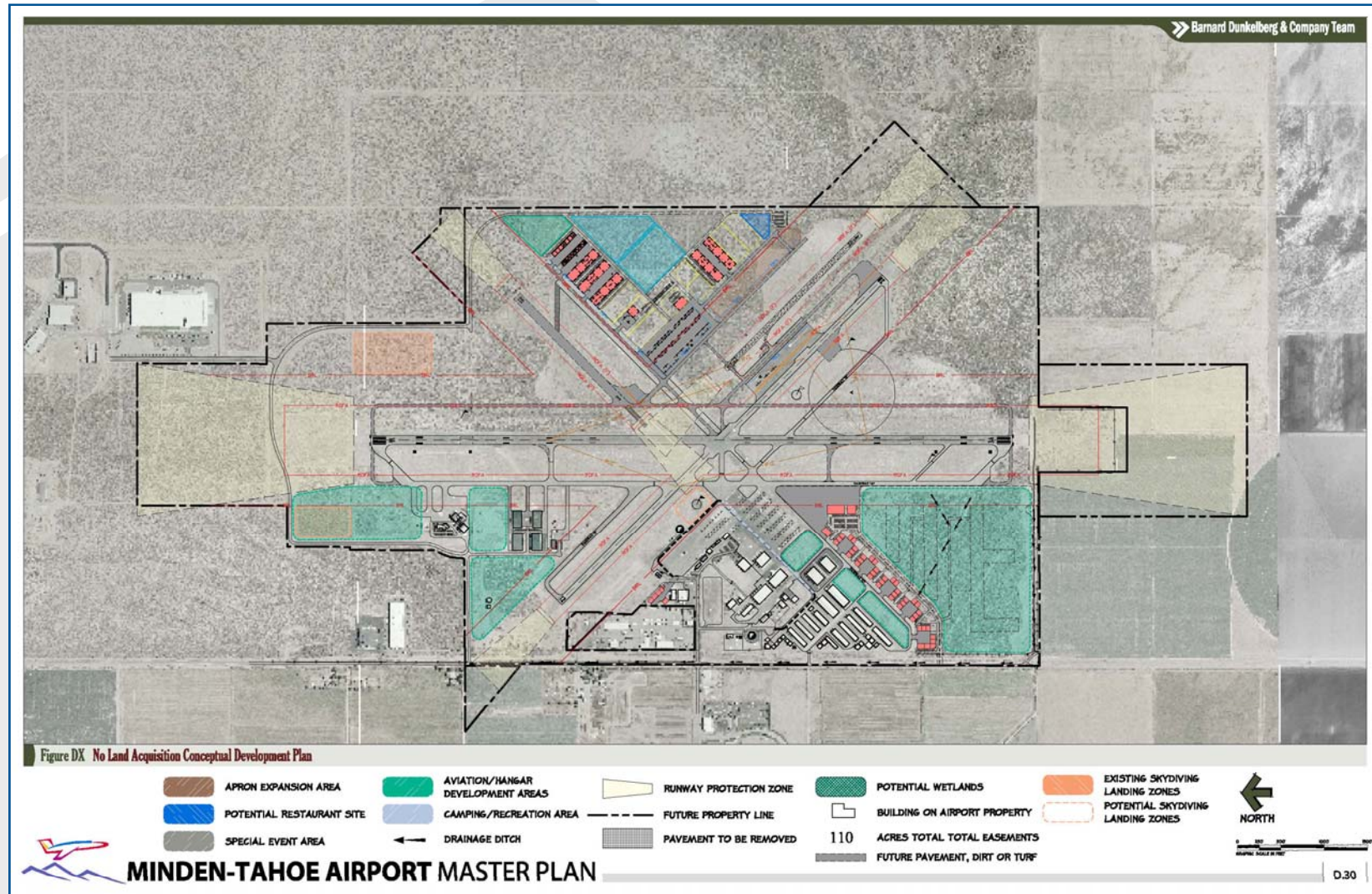
Revised East Landside Development Plan



Revised West Landside Development Plan



Revised CDP – On-Airport Development Only



Summary: *Vision for the Airport*

- **Continues County Airport Vision as stated in Resolution No. 2007R-041**
- **Role Does not Change** (The Airport will continue to serve the needs of Douglas County and Aviation Users)
- **Airport Fleet Does Not Change**
- **The Airport Master Plan Presents a Set of Physical Improvement Recommendations to Complement the Airport's Existing Operations Model**
- **The Airport Master Plan Allows for the Reservation of Space for Potentially Needed Facilities, but is not an Implementation Decision Document**
- **The Airport Master Plan = Long Term Physical Development**



Summary: *Facilities Constructed When*

- **Actual Demand Occurs**
- **Upon Completion of Appropriate Environmental Impact Documentation and Favorable Environmental Impact Determination**
- **Financially Feasible**
- **No Commitment of Funds on Local or Federal Level**



Next Steps

- **Incorporate Final Comments/Revisions into Draft Report Document**
- **Submit Airport Layout Plan (ALP) Drawing Set to FAA for Official Airspace Review**
- **Incorporate FAA Comments/Revisions in into ALP Drawing Set**
- **Publish Final Report**





MINDEN-TAHOE AIRPORT

Questions & Answers





MINDEN-TAHOE AIRPORT

Thank You!



» The Barnard Dunkelberg & Company Team

Pinon Aero Proposed Hangar Layout

**Pinon Aero Center
Project Analysis
Phase I thru V
10/10/07**

Total Development

Phase	Hangar	Size	Phase Total Square Feet	Phase Percent
Phase I	1	150,000	150,000	27%
Phase II	2	150,000	150,000	27%
Phase III	3	150,000	150,000	27%
Phase IV	4	150,000	150,000	27%
Phase V	5	150,000	150,000	27%
Total	5	750,000	750,000	100%

Phase I

Hangar	Size	Phase Total Square Feet	Phase Percent
Hangar 1	150,000	150,000	27%
Total	1	150,000	27%

Phase II

Hangar	Size	Phase Total Square Feet	Phase Percent
Hangar 2	150,000	150,000	27%
Total	2	300,000	54%

Phase III

Hangar	Size	Phase Total Square Feet	Phase Percent
Hangar 3	150,000	150,000	27%
Total	3	450,000	81%

Phase IV

Hangar	Size	Phase Total Square Feet	Phase Percent
Hangar 4	150,000	150,000	27%
Total	4	600,000	100%

Phase V

Hangar	Size	Phase Total Square Feet	Phase Percent
Hangar 5	150,000	150,000	27%
Total	5	750,000	100%

PHASED DEVELOPMENT

PHASE I
1 HANGAR 26,000 S.F.
OFFICE AREA 1214 S.F. (2-STORY)
SEWER LIFT STATION
PERMITS SUBMITTED 6-28-07
PERMITS APPROVED 8-8-07
BUILDING A * 38075
BUILDING B * 38080

PHASE 2-A
24,000 S.F.
8 HANGARS

PHASE 2-B
24,000 S.F.
8 HANGARS

PHASE 2-C
24,000 S.F.
8 HANGARS

PHASE 2-D
24,000 S.F.
8 HANGARS

PHASE 2-E
31,000 S.F.
1 HANGAR
FBO AND TERMINAL

PHASE 3

PHASE 4

PHASE 5

PHASED DEVELOPMENT

PHASE I

PHASE II

PHASE III

PHASE IV

PHASE V

PHASE VI

PHASE VII

PHASE VIII

PHASE IX

PHASE X

PHASE XI

PHASE XII

PHASE XIII

PHASE XIV

PHASE XV

PHASE XVI

PHASE XVII

PHASE XVIII

PHASE XIX

PHASE XX

PHASE XXI

PHASE XXII

PHASE XXIII

PHASE XXIV

PHASE XXV

PHASE XXVI

PHASE XXVII

PHASE XXVIII

PHASE XXIX

PHASE XXX

PHASE XXXI

PHASE XXXII

PHASE XXXIII

PHASE XXXIV

PHASE XXXV

PHASE XXXVI

PHASE XXXVII

PHASE XXXVIII

PHASE XXXIX

PHASE XL

PHASE XL I

PHASE XL II

PHASE XL III

PHASE XL IV

PHASE XL V

PHASE XL VI

PHASE XL VII

PHASE XL VIII

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PHASE XL X

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MINDEN-TAHOE AIRPORT

